

**REMARKS**

The following remarks, presented in conjunction with the above claim amendments, are believed to be fully responsive to the issues raised in the Office Action. Claims 23-30 were pending in this application. By this Amendment, claims 23-27 have been amended, and new claims 31-39 have been added. Support for the claim amendments and new claims can at least be found in ¶¶ [0059] – [0060], [0062] and [0064] (regarding a fluid reservoir, for example), and in ¶¶ [0168] and [0169] (regarding forward movement of the plunger during air purge, and multiple speeds for retracting the plunger, for example) of the specification (citations are to the corresponding published version of the present application). No new matter has been added. Favorable reconsideration is requested.

**Rejections Under 35 U.S.C. § 112 and Objections**

Claims 23-30 stand rejected under 35 U.S.C. § 112 as being incomplete for omitting certain essential steps. By this amendment, independent claims 23 and 27 have been amended to include the steps noted by the Examiner. Additionally, claims 23 and 27 have been amended to overcome the informalities noted by the Examiner with respect to the use of the term “predetermined limit” and the phrase “receiving a preset amount of fluid necessary for a subsequent injection from user input.” Withdrawal of the rejection and objections on these bases is respectfully requested.

**Rejections Under 35 U.S.C. § 102**

Claims 23-30 stand rejected under 35 U.S.C. § 102 as anticipated by one or more of the following references: U.S. Pat. No. 4,596,575 to Rosenberg et al (“Rosenberg”), U.S. Pat. No.

3,888,239 to Rubinstein ("Rubinstein"), and U.S. Pat. No. 4,502,488 to Degeronimo ("Degeronimo").

As amended herein, claim 23 recites the following:

23. A method for automatically refilling a syringe for an angiographic injector arrangement, said method comprising:  
sensing a volume of fluid in a chamber of said syringe;  
providing a fluid reservoir in communication with said chamber;  
receiving a user input associated with a subsequent injection;  
determining a preset amount of fluid necessary for the subsequent injection based on the user input;  
comparing said volume in said chamber with said preset amount of fluid; and  
retracting a plunger to a predetermined position within said chamber of said syringe to draw fluid from the fluid reservoir into the chamber when said preset amount of fluid is greater than the volume of fluid sensed in said chamber.

As suggested by the Examiner, claim 23 has been amended to recite receiving a user input, and determining a preset amount of fluid necessary for the subsequent injection.

None of the references cited by the Examiner discloses receiving a user input associated with a subsequent injection, determining a preset amount of fluid necessary for the subsequent injection based on such user input, and using the preset amount as part of a comparison test to determine when a refill should be performed. Specifically, none of the cited art teaches or suggests receiving a user input, determining a preset amount of fluid necessary for a subsequent injection based on the user input, comparing the volume in the chamber with the preset amount of fluid, and retracting a plunger to a predetermined position to draw fluid from the fluid reservoir into the chamber when the preset amount of fluid is greater than the volume of fluid sensed in the chamber.

In contrast, Rosenberg describes refilling with “the quantity of insulin previously delivered since the last refill operation,” at 3:5-6, but does not consider the amount of fluid necessary for a subsequent injection in determining whether or when to refill. Also in contrast, Rubinstein describes refilling “whenever the reservoir is not full,” at 6:8-9. Degeronimo describes filling a chamber “with the predetermined volume of injectate,” at 2:45, but does not contemplate refilling based on a comparison of the volume in the chamber to the amount needed for a subsequent injection. Thus, for at least the reasons presented above, claim 23 is believed to be patentable over the prior art.

Claim 27 as amended recites limitations analogous to those of amended claim 23, and is therefore believed to be patentable for at least similar reasons. The remaining claims all depend from independent claims 23 and 27, either directly or indirectly, and are therefore also believed to be patentable for at least the reasons presented above, and for other reasons as well.

### **Rejections Under 35 U.S.C. § 103**

Claim 26 stands rejected under 35 U.S.C. § 103 as being unpatentable over either Rosenberg or Rubinstein in view of U.S. Pat. No. 4,684,365 to Reinicke (“Reinicke”), and claim 28 stands rejected under 35 U.S.C. § 103 as being unpatentable over Degeronimo in view of Rubinstein.

Because claims 26 and 28 each depend from amended independent claim 23, claims 26 and 28 are believed to be patentable for at least the reasons presented above with respect to claim 23.

**New Claims 31-37**

Claims 31-37 have been added by this amendment. Support for new claim 31 (regarding maximum injection volume) can be found, for example, at ¶ [0102] of the specification. Likewise, support for new claims 32-37 (regarding multiple speeds at which the plunger is retracted during refill operations) can be found at ¶ [0169] of the specification. Thus, no new matter has been added. Prompt allowance of these claims is respectfully requested.

**CONCLUSION**

Applicants believe that all pending claims are in condition for allowance.

No additional fees are believed due with the filing of this Amendment and Response to Office Action. However, if any such fee is due, the Director is hereby authorized to charge any such fees or credit any overpayments to Deposit Account No. 50-0540. If an interview with the Examiner would expedite the prosecution of this application, the Examiner is respectfully invited to contact the undersigned.

Dated: **May 5, 2008**

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Aaron S. Haleva', is written over a horizontal line.

Aaron S. Haleva, Reg. No. 44,733  
KRAMER LEVIN NAFTALIS & FRANKELL LP  
1777 Avenue of the Americas  
New York, New York 10036  
(212) 715-9100 (telephone)  
(212) 715-8000 (facsimile)